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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------------------|----------------------|-------------------------|---------------------|------------------|--|
| 09/788,496 | 02/21/2001 | Hidemasa Yasuda | 0879-0298P | 6755 | |
| 2292 | 2292 7590 10/17/2005 | | | EXAMINER | |
| BIRCH STI PO BOX 747 | EWART KOLASCH & | VILLECCO, JOHN M | | | |
| FALLS CHURCH, VA 22040-0747 | | | ART UNIT | PAPER NUMBER | |
| | | | 2612 | | |
| | | DATE MAILED: 10/17/2005 | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|---|---|---|--|--|--|
| Office Action Summary | | 09/788,496 | YASUDA, HIDEMASA | | | |
| | | Examiner | Art Unit | | | |
| | | John M. Villecco | 2612 | | | |
| Period fo | The MAILING DATE of this communication app | ears on the cover sheet with the c | correspondence address | | | |
| | • • | VIS SET TO EVOIDE 2 MONTH | (S) OR THIRTY (30) DAYS | | | |
| WHIC - Exter after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period or reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 1) | Responsive to communication(s) filed on 25 Ju | ıly 2005. | • | | | |
| · · · | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | on of Claims | | | | | |
| 4)🛛 | 4)⊠ Claim(s) <u>1-12</u> is/are pending in the application. | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5)⊠ | 5)⊠ Claim(s) <u>4 and 10-12</u> is/are allowed. | | | | | |
| 6)⊠ | Claim(s) <u>1-3 and 5-7</u> is/are rejected. | | | | | |
| • | ☑ Claim(s) <u>8 and 9</u> is/are objected to. | | | | | |
| 8)[_ | Claim(s) are subject to restriction and/or | r election requirement. | • | | | |
| Applicati | on Papers | | | | | |
| 9) | The specification is objected to by the Examine | r. | • | | | |
| 10)🛛 | 10)⊠ The drawing(s) filed on <u>24 August 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | |
| | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) | The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a)[| a) All b) Some * c) None of: | | | | | |
| | 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| | | • | | | | |
| Attachment | t(s) | | | | | |
| | e of References Cited (PTO-892) | 4) Interview Summary | | | | |
| | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail Da 5) Notice of Informal P | ate Patent Application (PTO-152) | | | |
| | r No(s)/Mail Date | 6) Other: | , -/ | | | |

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DETAILED ACTION

Response to Arguments

Applicant's arguments filed May 27, 2005 have been fully considered but they are not 1. persuasive. As previously discussed in the advisory action mailed on June 28, 2005, applicant has argued that the examiner's position in claims 1-3 and 5 that the claims include functional limitations is misguided. Applicant argues that the "nature of the technology involved in the present applicantion inherently requires functional language in order to accurately define the relative structural relationship of the component parts of the devices claimed and/or to properly define the processes that the processing devices are intended to accomplish", as discussed in section 2173.05(g) of the MPEP. However, the examiner wishes to point out that section 2173 of the MPEP is directed towards rejections as they pertain to 35 USC 112, 1st and 2nd paragraph. Therefore, as stated in section of 2173 or the MPEP the examiner has evaluated each of the limitations of the claims as they pertain to 35 USC 112, 1st and 2nd paragraph. In terms of 35 USC 102 and 103, the applicant is directed towards section 2114 of the MPEP, which discusses the use of functional language in apparatus claims. As stated in this section, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function". Therefore, the rejection from the previous action is valid and the functional limitations in claims 1-3, 5, and 6 have not been considered. Therefore, the rejections of claim 1-3 and 5-7 from the final rejection will be repeated.

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2. Applicant has added subject which was previously indicated as being allowable to claims 10, 11, and 12. Accordingly, thes claims are being indicated as allowable in this office action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (U.S. Patent No. 5,546,134).
- 5. Regarding *claim 1*, Lee discloses an apparatus for correcting the brightness of an image signal. More specifically, Lee discloses an average picture level (APL) calculator (20) for determining the brightness of the image signal and a look-up table (30) for correcting the video signal according to the calculated brightness value. See column 4, line 65, to column 5, line 11. Additionally, Lee discloses that the correction of the video signal is done to correct signals picked up by cameras and displayed by a display. See column 1, lines 19-24.
- 6. As for *claim 2*, Lee discloses an apparatus for correcting the brightness of an image signal. More specifically, Lee discloses an A/D converter (10) which acts as the signal processing part, an average picture level (APL) calculator (20) for determining the brightness of the image signal, and a look-up table (30) for determining a correction amount and correcting the video signal according to the brightness value. See column 4, line 65, to column 5, line 11.

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Additionally, Lee discloses that the correction of the video signal is done to correct signals picked up by cameras and displayed by a display. See column 1, lines 19-24.

- 7. With regard to *claim 3*, Lee discloses an A/D converter (10) for converting the signals into digital signals and a D/A converter (40) for converting the corrected signal to an analog signal. The video signal is corrected before being D/A converted.
- 8. Regarding *claim 5*, Lee discloses an embodiment in Figure 5 that does not includes a variable gain amplifier.

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. <u>Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al.</u> (U.S. Patent No. 2004/0165070) in view of Christoff et al. (U.S. Patent No. 6,518,998).
- 11. Regarding *claim* 6, Yoshida discloses a camera (10) that includes a lens (12), a diaphragm (50), an image sensor (52), an image signal processing circuit that includes an analog processing circuit (54), an A/D converter (56), a digital signal processing circuit (58), a gamma correcting circuit, a YC signal generating circuit, and a D/A converter (78), a display (28) for displaying images output from the digital signal processing circuit (58), and a CPU. See paragraph 0053. The CPU (66) and control circuit (74) operate to control the diaphragm of the

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camera in response to the processed video signals. The CPU (66) serves as the display controlling circuit.

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Yoshida, however, fails to explicitly disclose that the camera includes a microcomputer connected to an EEPROM for controlling the diaphragm, shutter speed, and brightness of the image signal. Christoff, on the other hand, discloses a camera that is capable of adjusting the brightness of an image signal by offsetting the image signal. More specifically, Christoff discloses a camera that includes an imager (108), a D/A converter (132), a video monitor (116), and signal processing circuitry (112) that includes an amplifier (120), an A/D converter (124), a DSP (126), and a controller (136). As disclosed in column 3, line 65 to column 4, line 7, a brightness of the incoming image signal is calculated and an image signal is corrected according to the brightness value. The image signal is then sent to the video monitor (116) after being corrected. The correction is performed by offsetting the brightness levels of the video signals by a correction value. The controller (136) controls the shutter speed of the imager (108). Based upon the calculated brightness value being below a threshold value, a correction value for the black level is obtained from the table. See Figure 3.

Christoff, however, fails to disclose that the tables are stored in an EEPROM. Official Notice is taken, however, that EEPROM's are well known in the art for storing data. One of ordinary skill in the art would have recognized that an EEPROM would provide an excellent way of accessing the data stored in the tables shown in Figure 3.

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12. <u>Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al.</u>
(U.S. Patent No. 2004/0165070) in view of Christoff et al. (U.S. Patent No. 6,518,998) and further in view of Eino (U.S. Patent No. 6,120,435).

Regarding *claim* 7, as mentioned above in the discussion of claim 6, both Yoshida and Christoff disclose the limitations of the parent claim. However, neither of the aforementioned reference discloses the use of a switch to select between a correction mode and a non-correction mode. Eino, on the other hand discloses a method of adjusting the brightness of an image, wherein a button (25A) is used to implement the brightening procedure. See Figure 3. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a switch in order to implement the brightness correction so that a user may manually select the desired brightness of the image.

Allowable Subject Matter

- 14. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 15. The following is a statement of reasons for the indication of allowable subject matter:

Regarding *claim 8*, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest a variable gain amplifier which is controlled by the microcomputer to provide an optimum gain value falling within an effective gain range provided by a data table within the EEPROM and which does not permit a lowering of the SN ratio.

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16. Claims 4 and 10-12 is allowed.

17. The following is an examiner's statement of reasons for allowance:

Regarding claims 4 and 10-12, the primary reason for allowance is that the prior art fails to teach or reasonably suggest a gain controlling part that controls a gain of the variable gain amplifier according to the brightness level of the video signals, wherein the gain of the variable gain amplifier is controlled to an optimum gain value falling within an effective gain range and which does not permit a lowering of an SN ratio.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact, the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John M. Villecco October 14, 2005